

What is claimed is:

1. A method for making an optical film, comprising:
coextruding a first film comprising a first surface layer detachably connected to a
second layer, the first surface layer comprising a first disperse phase disposed within a
5 first continuous phase; and
separating the first surface layer from the second layer.
2. The method of claim 1, wherein the first film further comprises a second surface
layer comprising a second disperse phase disposed within a second continuous phase.
- 10 3. The method of claim 2, wherein the second layer is disposed between the first and
second surface layers.
4. The method of claim 1, wherein the first disperse phase and the first continuous
15 phase are polymeric.
5. The method of claim 1, further comprising:
incorporating the first surface layer into the optical film.
- 20 6. The method of claim 5, wherein the first layer is divided and incorporated into a
plurality of layers of the optical film.
7. The method of claim 1, further comprising:
casting the first film against a casting surface after the coextruding step.
- 25 8. The method of claim 7, wherein the first surface layer contacts the casting surface
during the casting step.
9. The method of claim 7, further comprising:
30 orienting the first film by stretching along at least one direction.

10. The method of claim 9, wherein the separating step is performed after the orienting step.
11. The method of claim 9, wherein the continuous and disperse phases of the first layer have refractive indices that differ by less than 0.05 along a first in-plane axis and by more than 0.05 along a second in-plane axis after the orienting step
12. The method of claim 1, wherein the optical film has a gain of at least about 1.5.
13. The method of claim 1, wherein the first disperse phase and the first continuous phase form a blend, and the percent by volume of the disperse phase in the blend is within the range of about 35% to about 50%, based on the total volume of the blend.
14. The method of claim 1, wherein at least some of the first disperse phase undergoes fibrillation during the coextruding step.
15. The method of claim 3, wherein the first and second surface layers are each detachable from the second layer, and wherein the separating step includes separating the second surface layer from the second layer, the method further comprising:
assembling at least the first and second surface layers into the optical film.
16. The method of claim 15, wherein the first and second disperse phases are polymeric.
17. The method of claim 15, wherein the first surface layer forms a first surface of the first film and wherein the second surface layer forms a second surface of the first film.
18. A method for making an optical film, comprising:
providing a melt stream having a continuous phase comprising a first polymeric material and a disperse phase comprising a second polymeric material;
passing the melt stream through a plurality of vanes; and

extruding the melt stream through a die.

19. The method of claim 18, further comprising:
casting the extruded melt stream against a casting surface to form a cast film.

5

20. The method of claim 19, further comprising:
orienting the cast film by stretching along at least one direction.

21. The method of claim 18, wherein the melt stream has a principle direction of flow
10 along a first axis, and wherein each of the plurality of vanes has a longitudinal axis that is
disposed essentially perpendicular to the first axis.

22. The method of claim 18, wherein the plurality of vanes is disposed in the die.

- 15 23. The method of claim 18, wherein the die comprises die lips, and wherein the
plurality of vanes is disposed adjacent to the die lips.

24. The method of claim 23, wherein the plurality of vanes is spaced apart from the
die lips.

20

25. The method of claim 18, wherein the plurality of vanes defines a plurality of
narrow channels, and wherein the melt stream passes through the plurality of narrow
channels.

- 25 26. The method of claim 25, wherein the melt stream recombines into a singular melt
stream after passing through the plurality of narrow channels.

27. The method of claim 18, wherein each of the plurality of vanes is disposed
orthogonal to a direction of flow of the melt stream.

30

28. The method of claim 18, wherein the die is selected from the group of a manifold extrusion die, a drop die, and a casting die.